Comparative analysis

IV. Comparative Analysis

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A. Introduction

In the introduction we made clear that the goal of this project was not so much to provide a traditional overview of medical malpractice law in a number of European member states. Taking the cases as a starting point, the country reporters have shown the method of legal reasoning in medical malpractice cases in the various countries. This comparative case methodology allows us to analyse whether a similar case would lead to different outcomes in the various countries.

In this part of the project we will summarise and compare the findings in the country reports. The comparative conclusions in this part will therefore necessarily be limited to the issues which have been at stake in the cases and therefore in the country reports. The country reporters had been asked to focus on the legal reasoning in their country as well as on the practical result both with respect to a (possible) finding of liability and with respect to the amounts. Specific legal issues, which are obviously of great theoretical importance, such as the contract – tort boundary, will not be discussed in much detail.

Almost all country reporters have rightly indicated that the six cases presented above in fact fall into two groups. Cases one and two both relate to a possible liability for a failure to disclose information on potential risks. In these cases there is certainly high damage, but this unfortunate result may be the "normal" consequence of the type of medical treatment the particular patient received. In those cases the health care providers are not blamed for having acted wrongly as far as the medical treatment itself is concerned. The claim in these cases is, however, that the patients should have been warned about the possible negative consequences, as a result of risks, which may follow from this treatment. Cases 3–6 on the other hand, deal with the more traditional medical malpractice cases, being those where the claim of the patient is that the health care provider has acted wrongly in executing the medical treatment. In those cases the claim is therefore that it is the professional fault of the health care provider in treating the patient which caused the particular damage.

These types of cases can indeed be considered as separate problems and therefore we will deal with them separately in this comparative overview as well. We will therefore first focus on the cases dealing with the duty to disclose

(cases 1 and 2) and then with the cases dealing with professional faults (cases 3–6). The comparative analysis will be provided in such a way that we first briefly summarise the contents of the case, then provide a comparative analysis of the legal problems which played a role in the various cases and finally compare the differences in the practical result of the cases according to the various countries.

Obviously it is not useful to repeat in this comparative conclusion the contents of the country reports. Therefore also some points of general interest will be mentioned and a few examples from some countries will be provided. The reader should, however, be aware of the fact that this report mainly provides some highlights of the country reports. For an accurate insight in the legal system of the various countries it is necessary to consult the country reports.

B. Cases: Comparative Summary

1. Cases 1 and 2: Duty to Disclose

a) Summary of the Contents of the Cases

In case 1 the plaintiff had been complaining about severe pain in the loin area for many years. To find out the possible cause of these pains and to asses the severity of a possible nerve root damage, a myelography and after that a CAT were supposed to be carried out. Immediately before these tests, to be carried out by a radiologist, the plaintiff signed a declaration in which she confirms that she has been informed about the risks of the planned tests. This form points out risks like nausea, headache, and temporary loss of consciousness and infections. There was no information about the risk of an epileptic attack or about the risk of a possible paralysis, which could be connected with the test. After the test took place the plaintiff, laying on a stretcher, suffered from generalised seizure with damage to her right shoulder (permanent) as a consequence, as well as blindness and speech problems during that day.

The German court holds that as such the risk of an epileptic seizure as a result of myelography could not have been foreseen. However, the court at the same time holds that the patient should have been informed of the possible risk of paralysis. In this case there is failure of information concerning the paralysis, but a different risk (seizure) occurs. The consequence is that a full liability is accepted for all damages. Given the defect in the informed consent process the court holds that any medical treatment is therefore unlawful and the physician is held liable for all the damage resulting, even though another risk occurs than the one, which the patient had to be informed about.

In case 2 the plaintiff, an Iranian citizen, had been complaining about severe pains in his legs for many years. He had more particularly difficulties when climbing stairs and had to use crutches from time to time. The hospital discovered that these pains were caused by a compression of the spinal cord and suggested surgery. The day before surgery the plaintiff signed a consent form for the surgery carried out by the physician in which he declares to have been in-

formed about the main risks of the surgery. The surgery caused a complete paraplegic syndrome and the plaintiff is confined to a wheelchair for the rest of his life.

The German court holds that the informed consent process has been insufficient, more particularly because the plaintiff did not understand what he signed, because he could not speak or understand German. The plaintiff's son, who spoke only very limited German at the time as well, had accompanied his father to the hospital. Therefore the court holds that the written informed consent form does not furnish evidence and liability is based on the fact that the patient should have been informed about the risk of paraplegia. The court furthermore holds that it is likely that the plaintiff would not have agreed to surgery if he had known about the risks associated with it. The court, however, also stresses that there was no need to inform the plaintiff about alternative operation techniques since these concerned mainly different techniques to perform the surgery with the same aim and with basically the same risks. The plaintiff claimed damages for pain and suffering to the amount of 200,000 DM (102,258 EUR).

b) Contents of the Duty to Inform

These first two cases deal with the crucial question in medical law about what kind of risks a patient should be warned. Many legal systems address in that respect the question whether the patient should be informed of all potential, even exceptionally low, risks or whether the duty to inform also depends on the potentially severe consequences of certain risks, even when the probability of occurring is relatively low.

This issue is extensively discussed in French case law. As the French report made clear, with respect to French law one always has to make a distinction between liability which is governed by public law on the one hand and by private law on the other hand. If the tortfeasor is a public servant or a public authority (such as a public hospital) the victim must bring his action in damages before an administrative tribunal, which will apply administrative liability law. When the defendant is on the other hand a private person or institution the rules of private law apply and the cases are brought before an ordinary court. The rule in French private law was apparently until 1998 that physicians only had to inform the patient about "normally foreseeable risks" and not about "exceptional risks". As the French report indicates[1] this has been changed in a decision of the Cour de Cassation of 1998 where it has been decided that the physician is under a duty to give a fair, clear and appropriate information about the serious risks associated with a test or treatment, even if those risks are of exceptional occurrence. According to the French reporter a serious risk is the risk of death, permanent disability or of serious disfigurement. The conclusion of the French reporter is therefore that on the basis of this case law the patient should have been informed about the risk of a myelography causing paralysis. The rule seems to be even stricter in French public law. According to the Bianchi

[1] Supra p. 105.

case of 1993 of the French Conseil d'Etat it was held that when a necessary medical test or treatment carries a known but exceptional risk and when there is no reason to think that it is likely to occur in the circumstances, the public hospital is liable for all the direct damaging consequences of such a test or treatment, provided that they are not related to the patient's initial state of health, nor to its foreseeable evolution and providing that the loss suffered by the patient is extremely serious. As the French reporter indicates, French public law has apparently accepted a strict liability for the so called "therapeutic risks"[2].

Portuguese law goes in the same direction. The Portuguese report indicates that if the risk is a serious one, this risk has to be disclosed even if it may be considered remote[3].

Under English law there may be liability for negligence if the risks of the procedure are not adequately explained. The English report indicates a case of a claimant who suffered partial paralysis as a result of surgery and had not been warned concerning this risk. Although the risk was little over 1 percent, not informing the patient of that risk was considered proper at the time[4]. Generally English courts will, according to the English reporter, rely upon professional expert opinion with respect to the necessary information concerning the disclosure of risks. The English report also indicated an (Australian) case, which pointed out that the doctor has a duty to warn a patient of a material risk inherent in the proposed treatment.

In the Netherlands the duty to inform is laid down in article 7:448 paragraph 1 and 2 of the Civil Code and this provides that the health care provider shall inform the patient clearly, and if requested in writing, about the proposed examination and treatment and about the developments concerning the examination, the treatment and the condition of the patient's health. Moreover, the health care provider shall inform the patient about what he reasonably needs to know concerning – inter alia – the likely consequences for and risks to the patient's health[5]. Given this clear statutory duty the Dutch country reporters therefore conclude that the patient probably had to be informed concerning the particular risk of the epileptic seizure and the risks of paralysis[6], since it can not be argued that these serious risks are that well generally known that such information would be superfluous. On the other hand, the duty to inform about a particular risk in a specific case will always largely depend upon on the one hand the likelihood of the occurrence of the particular risk and on the other hand the potential seriousness of damage, when the risk materializes.

The Belgian report indicates that a doctor must inform the patient about the normal risks of surgery. There would, according to Belgian law, be no duty to inform about large, but exceptional risks, nor for less exceptional, but minor risks. This constitutes a noteworthy difference with the definition of the duty to inform under French law. The Belgian report indicates that if the epileptic seizure could not reasonably have been foreseen, there would have been no

[2] French country report, supra pp. 108–109.
[3] Supra p. 181.
[4] Supra pp. 226–227.
[5] Supra p. 151.
[6] Supra pp. 165–166.

duty to inform with respect to that particular risk since it would not be a normal and foreseeable risk[7].

As in the other legal systems, also in Switzerland it is held that the contents of the duty to disclose depends among others on the probability that a certain risk will occur, upon the possible serious consequences when the risk occurs and upon alternative treatments[8]. No information is necessary concerning very small probability risks with less serious consequences. If for instance there is a 70% probability that an operation will not lead to any change for the better in the situation of the patient and if that same operation contains a 35% risk of paraplegia, the patient should be informed of those risks, indicating these precise numbers, according to the Swiss Supreme Court[9].

Also the Austrian reporters indicate that the paralysis is certainly a serious risk about which the patient should have been informed[10]. Also under Austrian law the statistical probability of the occurrence of certain risks is taken into account when the content of the duty to disclose is established. However, according to a decision of the Austrian Supreme Court information is necessary even concerning a risk of infection which is only one in thousand, when the physician recognises that the patient would otherwise believe that the operation is fully without risk[11].

Obviously the country reports themselves provide far more details in how the duty to disclose is assessed in legislation and/or case law in the particular country. Although all countries apparently agree that information about serious risks is necessary, there seem to be differences concerning the question whether the physician should also warn about rather exceptional risks. Nevertheless the tendency in most countries seems to go in the direction of a duty to warn, even if the risks are of a relatively low probability of occurrence, but when the consequences may be very serious. Therefore most reporters seem to agree that there existed a duty to warn with respect to the risk of paralysis in case 1 and the risk of paraplegia in case 2.

One of the issues which is discussed in some country reports concerning the duty to disclose is the so called "therapeutical exception". Some countries apparently agree that the doctor may refuse to disclose certain risks if disclosure could lead to a deterioration of the health condition of the patient, e.g. because of a high fear of an operation. This therapeutic exception is discussed in Switzerland[12] and in Austria, where it is recognised that the patient may under some circumstances be protected by not providing full information. Also article 7:448, paragraph 3 of the Dutch Civil Code provides for the therapeutic exception, although its scope of application is rather limited[13]. Others, for instance the UK report, seem to stress more that it cannot only be the opinion of the doctor which will decide what information should be given to the patient.

[7] Supra pp. 93–94.
[8] Supra pp. 203–206.
[9] *See* the cases cited in footnote 40 of the Swiss country report, supra p. 206.
[10] Supra p. 65.
[11] *See* the case cited in footnote 35 of the Austrian country report, supra p. 63.
[12] Supra pp. 208–209.
[13] Supra p. 152.

In the English report it is mentioned that the exception of "therapeutic discretion" may amount to a very paternalistic approach towards the patient[14]. Anyway, also the Austrian and German reporters agree that if time allows it (like in these cases 1 and 2) full information should be given to the patient who can then make an informed choice on whether to go on with the test or treatment. The therapeutical exception was, by the way, not mentioned in cases 1 or 2 since it apparently did not play any role in those cases[15].

c) Burden of Proof of Disclosure

A question, which is addressed in many country reports, is who has to prove that adequate information has been given to the patient. This is also addressed in a number of country reports, either explicitly or in the context of the discussion of the value of "informed consent forms", which will be discussed below. A starting point for many legal systems is that, as will also be discussed below, any operation is considered as an attack on the physical integrity of the patient. Therefore many reporters argued that without proper information there is in fact no proper consent of the patient to the treatment, which has consequences for the issue of liability. The fact that any treatment without proper information constitutes an infringement on the physical integrity of the patient obviously has its importance for the burden of proof as well.

France can point at a 1997 Cour de Cassation case in which it was clearly stated that the doctor has to show that he fulfilled his duty to inform the patient[16]. The French reporter applies this 1997 case also to case 2 and shows that since the burden of proof is put on the doctor also a French judge would probably consider that there was no sufficient evidence of a fair warning in case 2. A similar approach seems to be followed in Switzerland and Austria where it is argued that a treatment always constitutes an infringement of the physical integrity and is therefore only justified when appropriate consent is given by the patient. It is therefore, according to the Austrian report, the health care provider who has to prove that appropriate information has been given to the patient, so that he could give an informed consent.

Some country reports do not treat the question concerning the burden of proof of an adequate warning separately, but argue that it is to the patient to show on a balance of probabilities that he would not have gone ahead with the operation (in case 2), had he been given appropriate information[17]. This issue will be discussed in the context of causation.

d) Informed Consent Forms

A question that obviously arises in the context of cases 1 and 2 is how one should judge the value of the informed consent forms, which have apparently been used both in case 1 and in case 2. The value of the informed consent form in case 1 is not a real issue since the form only pointed at minor risks, but not at

[14] Supra p. 228.
[15] This exception is extensively discussed in the German report, supra pp. 125–126.
[16] Supra p. 106.
[17] *See* the English report, supra pp. 228–231.

the risk of an epileptic attack, nor at the risk of a possible paralysis. In the second case, the consent form referred to more serious risks, some of these, such as paralysis, had been expressly added in writing by the physician who performed the informed consent process. In that particular case the issue was, however, whether the patient was able to understand what he actually had signed.

The country reports which have reflected on the value of an informed consent form almost all state that the signing of a written document itself is not sufficient proof of appropriate information (although it may obviously strengthen the position of the health care provider). For instance concerning case 2 the Swiss report states that the signing of a form as such does not constitute sufficient proof of an adequate warning[18]. Also the Austrian and the Dutch report indicate, that solely a form can not constitute sufficient warning. A personal talk is necessary in which the patient is pointed at the various risks[19]. The same conclusion is reached in Belgium; the Belgian reporters indicate that the signing of a form as such can not constitute sufficient proof of adequate information.

The conclusion of these few comments concerning the value of an informed consent form seems to be that most legal systems agree that the form may provide evidence *ex post* of the fact that e.g. a talk with the patient took place in which he was pointed at the various risks, but that the signing of a form as such can never replace such an interview in which information has been provided. This is obviously the more true if the patient would not even be able to understand the form he signed.

e) The Relevance of the Language

The language is most obviously an important point in deciding case 2 where the German court accepted that there was no evidence that the patient understood any German and that he had been adequately warned in a language which he could have understood. That was in the end the decisive factor in the German case: the patient did not understand what he signed, because he could not speak or understand German. Most country reports agree that the information provided has of course to be such that the patient can actually understand the risks which are explained to him and on the basis of that information make an adequate assessment of whether to go on with the test or treatment or not. Such an assessment is obviously not possible if the health care provider did not provide the information on risks in a language which the patient could understand.

The Swiss report indicates that language problems do not change the duty of the health provider to inform the patient. In this particular case there was, moreover, no specific urgency to perform the operation so that more time could have been taken to provide information to the patient in a manner which he could understand[20]. For the Austrian reporters the language issue would be as decisive as for the German court. They point out that information could also

[18] Supra p. 213.
[19] *See* supra pp. 61–62 (Austria) and p. 167 (The Netherlands).
[20] Supra p. 212.

have been given to a third person, whom the patient fully trusts, who might be able to translate, but such a person was not available in the particular case[21]. The Dutch report indicates that although the presence of the son in case 2 hardly could be considered as evidence of adequate information, the hospital could have looked for alternatives, such as e.g. the provision of written information on the surgery and the risks involved.

In sum: in this case 2 the hospital could not bring evidence of adequate information of the patient, given the fact that it did not show that sufficient efforts had been made to inform the patient in a language which he could understand.

f) Timeliness of Information

All country reporters also seem to agree that the timing of the disclosure of information should obviously be such that the patient still has the possibility to make an informed choice on whether or not to engage in the test or treatment. In case 1 the patient had been given information just before the test (and even that information had not been adequate). The German court in the particular case decided that in such a case the patient almost had to expect the beginning of the treatment any minute after the consent is given and is therefore put under pressure, believing that a process has already started which can not be stopped any longer. This problem seemed to be less serious in case 2 where the patient and his son talked to the physician the day before the surgery (but that information was again possibly inadequate given the language issue).

The Belgian report indicates that when a conversation which should provide information takes place immediately before the test such an information provision should be considered not timely[22]. Also the Swiss report indicates that the provision of information in case 1 might have been late [23] and this seems to be the opinion of the Austrian reporters as well[24]. The Austrian reporters stress moreover that this did not concern an emergency, so that there was enough time for adequate information provision. The Dutch reporters, however, seem to be milder when judging the question whether information has been provided in due course[25].

g) Consequences of a Lack of Information

In the two cases 1 and 2 most country reporters held apparently that according to their legal system the lack of information would be considered a breach of the health care providers' duty to disclose. One question, which obviously arises, is whether this information failure stands in a causal relationship with the damage suffered by the patient, which will be discussed below. Another issue is whether there is automatic liability now that a test or treatment is executed upon the patient without proper information being provided and hence without in-

[21] Supra p. 68.
[22] Supra p. 95.
[23] Supra p. 212.
[24] Supra pp. 64–65.
[25] Supra p. 153.

formed consent to such an infringement on the physical integrity. Most legal systems, a few examples will be provided, referred to in the country reports, indicate that there is indeed in principle liability as soon as there is a violation of the duty to disclose. Moreover, some reporters indicate that if the health care provider treats a patient without informed consent there will be full liability for the resulting damage. Thereby it is stressed that this liability extends also to risks and damage which may have actually occurred, although it would not have been necessary to inform with respect to these particular risks. The latter problem played an important role in case 1. This apparently constituted a case where the patient should have been warned about the risk of paralysis, whereas a different risk (epileptic seizure) materialises. As was mentioned above, the German court held that since the radiologist treated the patient without informed consent (no adequate information concerning the paralysis risk) the whole medical treatment had to be considered unlawful and hence the health care provider was held liable also for the different risk which materialised (the seizure), for which the patient should in fact not have been informed. This is a consequence of the fact that according to many reporters medical tests or treatments principally still constitute an infringement of the physical integrity of the patient and are hence unlawful unless there is appropriate consent. If this informed consent is missing, the whole treatment should therefore be considered unlawful and the health care provider fully liable for all resulting damage. This is, as the German country report indicates, a consequence of the adage "versari in re illicita": he who behaves wrongfully has to bear the full risk of all consequences of this behaviour[26].

With a few modifications most legal systems seem to agree to this result. French law seems to hold the health care provider liable for the failure to provide adequate information in both cases 1 and 2. Belgian, Portuguese and Dutch law repeat the principle statement that any treatment without informed consent has to be considered wrongful. In Portugal a medical act without proper consent constitutes a criminal offence. In Dutch law it is stressed that in case of inadequate information there could have been a liability, so for instance in case 1, even if the risk about which the patient had to be warned (the paralysis) did not materialise. Even if there were no physical damage at all, the patient in the Netherlands could claim compensation for all damage suffered as a consequence of the test[27]. Also according to Austrian law there is full liability in case 1 as a consequence of inadequate information, even though in fact a different risk has materialised[28].

A somewhat different position seems to be taken in English law. The country reporter argues that the claim would probably fail on the ground that the harm suffered is not within the scope of the defendants breach of duty[29], although some case law is cited which may be used to constitute liability in case 1; the treatment itself is not unlawful unless the patient does not even understand its general nature. While there can be liability for negligence for failure

[26] Supra p. 125.
[27] Supra pp. 158–159.
[28] Supra p. 65.
[29] Supra pp. 230–231.

to inform, yet the outcome seems therefore uncertain under English law. Having read the English report, the Dutch reporters considered this point of view to be an elegant solution[30].

Interestingly, a similar approach seems to be followed under Portuguese law. Since the risk which occurred is not the risk which was supposed to be mentioned, a Portuguese judge would deny liability since the scope of protection is limited to these specific risks about which the physician had to warn[31].

h) Causation

Generally the issue of causation is already a difficult one in medical malpractice cases. If medical malpractice is established, in addition it will have to be shown that the current situation of the patient is caused by the wrongdoing of the health care provider. Given the fact that people are usually already in a less healthy condition this requirement of a causal link often constitutes the major problem in medical malpractice cases. This problem may sometimes even be larger when the wrongdoing is a failure to disclose information. The way the issue of causation is usually approached in those cases is that the question is asked whether the patient would have gone ahead with the test or treatment if he had been fully informed on the particular risks. In that respect obviously the prior condition of the patient plays an important role as well.

On this issue of causation the legal systems seem to differ quite a bit. The German court seems to be relatively easy going concerning the requirement of causation in cases 1 and 2. In case 1 the patient claims full recovery of the damage, apparently assuming that the patient would not have engaged in the test and hence not have suffered the damage, when given appropriate information. In case 2 the German court realises that causation is not easy to prove since the Iranian patient was already in a relatively bad state before entering the hospital. He had a myelopathy with paraplegic symptoms before the surgery was performed; he had severe pain in his legs, had difficulties with walking the stairs and had to use crutches from time to time. The question therefore arises whether the patient would not have gone ahead anyway with the operation even if he had been adequately informed about the risks. The German court argues that it does not seem entirely improbable that the plaintiff would have been in a conflict of decision making, if he had been given full information in an adequate manner. He is therefore awarded full compensation as well.

The French approach would have been a different one. In case of a failure to warn there would not be liability for the full loss, but the court should consider what the probability would have been that the patient would have refused the fatal treatment, when given appropriate information. If that probability can be established the patient can be awarded a proportion of his damage for the loss of a chance to refuse the treatment, which led to the damage[32]. How large this chance is, depends entirely upon the facts. The French reporter judges in case 1 that since the patient had been suffering from severe pains and bladder prob-

[30] Supra p. 166.
[31] This is, however, treated as a problem of causation in the Portuguese report, supra p. 182.
[32] Supra pp. 106–107.

lems it was likely that, even when informed appropriately about the risks of paralysis, she would have agreed to the myelography. Hence, other than in the German case, the plaintiff would not be fully compensated for the loss in France, but would only be awarded a percentage, depending upon the chance that she would have refused the test when appropriately informed. As far as case 2 is concerned, French law takes into account the fact that the patient had already been suffering from paraplegic symptoms. Even if well informed, he would maybe have accepted the operation, thus running the risk of paralysis anyway. The French reporter believes that in this case the French court would probably award 50 % of the damage to the plaintiff.

This French approach of "loss of a chance" to causation, amounting to a proportionate liability rule, seems to be followed in Belgian and Dutch medical malpractice law as well. The Dutch reporters stress that also Dutch law requires that the fault of the health care provider is the *conditio sine qua non* of the damage[33]. However, in case of uncertainty concerning the causal connection the theory of the loss of a chance will be applied in the Netherlands, although the Dutch Supreme Court has not expressed itself yet on the admissibility of this doctrine. In case of information failures the judge will ask the question whether the patient would have made another assessment if he had been appropriately informed. Compensation is possible for the loss of that chance.

This loss of a chance theory is, however, not accepted in all legal systems. Under English law the claimant must prove that he in principle would not have gone ahead with the test or treatment if he would have been properly informed[34]. The approach in England is, other than in France, more an "all or nothing" approach in the sense that the claimant must show on a balance of probabilities that he would not have gone ahead, when given appropriate information. If the patient can satisfy this burden of proof he can in principle claim full compensation. The English approach is hence different than the German one since the patient himself must prove on a balance of probabilities that he would not have taken the test or treatment when properly informed (whereas in Germany the burden of proof is reversed); English law differs from French law in that the approach to causation is "all or nothing", instead of proportionate, following from the French doctrine of "loss of a chance".

The English approach to causation seems to be followed in Austria and Switzerland. Austrian law clearly indicates that there would be no liability for insufficient disclosure if it would appear that the patient would have agreed to the test or treatment anyway, if appropriate information had been given. In that case the proof of a causal relationship would fail[35]. Whether that is the case in the particular case 1 is not clear. Austrian law does take into account the prior condition of a patient, which is obviously relevant in case 2. In that case Austrian law would provide for a division of the damages (Schadensteilung), assuming that in case 2 at some point the health condition of the patient would have turned anyway as bad as after the operation. In that case Austrian law would

[33] Supra pp. 156–157.
[34] Supra p. 228.
[35] Supra p. 65.

hold the health care provider only liable for the fact that the deteriorating health condition in fact occurred earlier (as a consequence of the operation) than what the natural cause of events would have been. The liability will then extend to the increased damage, being the damage which occurred during the period between the operation until the moment that the paraplegia might have become complete also when the operation had not taken place.

In Austria as in Switzerland, the burden of proving that the patient would have engaged in the operation, had he been adequately informed lies on the health care provider. The Swiss report on the other hand indicates that the patient should at least make plausible that he would not have agreed to the test or treatment if appropriate disclosure concerning the risks had been given[36].

Whereas most legal systems agree that in both cases there might have been a breach of the duty to inform, most of the differences appear when it comes to establishing the proof of a causal relationship between such a breach and the damage. These differences mostly relate to the question how causal uncertainty (taken into account the prior condition of the patient) has to be translated in the claim on damages of the particular patient. These differences are obviously not only of importance for medical law but for tort law in general as well.

We will now try to provide a brief insight in the potential results of cases 1 and 2, according to the country reporters and see how these differ from the approach in the German cases, which were taken as the basis for the analysis. It should be mentioned that not all country reporters have provided results in black or white statements since this was not always possible. In some countries there is not sufficient case law to provide a clear answer; in other countries the case law goes in different directions.

i) Results of Case 1

The German court found the defendants liable, but the (high) court itself does not fix the amount of damages. It is, however, clear from the case that the German court accepts full liability for the damage which resulted from the test which had been performed without having provided adequate information. A compensation for non-pecuniary loss in the range of 150,000–200,000 DM (76,693–102,258 EUR) is claimed. This seems to be exceptionally high, according to the German reporter[37].

In France the result would be, as indicated, similar with respect to the finding of negligence, but the amount of damages would be much lower since the French reporter was of the opinion that a French court would probably argue that the patient might have gone ahead (given his prior condition) with the test anyway, even when adequately informed about the risks. There would thus only be a loss of a relatively small chance not to have incurred the damage.

A similar result seems to be achieved in Austria, where it is equally held that the information was inadequate. The Austrian court would in such a case, in addition to material damage, also award compensation for pain and suffer-

[36] Supra pp. 210–212.
[37] Supra p. 126.

ing. The amount mentioned in the Austrian report[38] seems, however, much lower than the amount which was at least claimed in the German case.

According to Swiss law the whole test would be considered unlawful given the inadequate consent; the causation issue remains, however, unclear. The patient needs to prove that she would not have given permission for the test if she had been adequately informed.

Dutch law seems to indicate that the hospital and/or the health care provider would be liable for the damages, which result from the inappropriate information, whereby the patient could at least claim a percentage of the damage, taking into account the loss of a chance.

Under Belgian law there would probably be no liability at all in this case since the Belgian report argues that the patient must only be informed about the normal risks of a treatment. Moreover, the Belgian report claims that the patient would not be in the position to prove that he would have been in a conflict of decision making, when properly informed.

Also the English report indicates that there is probably no liability under English law, given the fact that another risk materialised than the one for which the duty to inform was breached.

The same result would be reached in Portugal. Moreover, the Portuguese report indicates that if liability were accepted, the amount for non-pecuniary loss would be substantially lower than the amount claimed in the German case (50,000 DM [25,565 EUR] instead of 200,000 DM [102,258 EUR]).

The Swedish report indicates that an amount might be paid between 31,700 and 38,800 DM (16,208 and 19,838 EUR).

Hence, there seem to be considerable differences in the result, depending both on the issue of whether there was liability as well as on the issue whether there was causation and with respect to the amount of damages.

j) Case 2

The German court awarded in case 2 an amount of 200,000 DM (102,258 EUR) plus an interest of 4 percent for pain and suffering and, in addition the German court held the defendants liable for all present and future material and immaterial damage of the plaintiff. This is, according to the German reporter, the usual amount for non-pecuniary loss of this kind[39].

Most of the other legal systems would in this case come to the conclusion that the consent by the patient had not been given (given the language problem), so that there would be liability. The differences between the legal systems have been discussed above. Also the actual amounts to be paid might differ. For instance in France it was indicated in the report[40] that this would be the typical case where a claimant could claim 50% of his loss. Portugal would also allow significantly less than 200,000 DM (102,258 EUR) for non-pecuniary loss. The Austrian report equally indicates that one has to take into account the (bad) prior condition of the patient, which indicates that there would be no full com-

[38] *See* the decisions mentioned in footnote 64 of the Austrian report, supra p. 67.
[39] Supra p. 130.
[40] Supra p. 111.

pensation due. The Austrian report equally indicates that the amount of pain and suffering would be lower than the one awarded in Germany. An exception constitutes the English report: if there were generalised paraplegia this would in England lead to an amount of 300,000 DM (153,388 EUR), although there might be some discounting necessary for the prior disability. In Sweden the compensation for permanent impairment would be 41,700 DM (21,321 EUR).

2. *Cases 3–6: Professional Fault*

a) A Brief Summary of the Contents of the Cases

Case 3 is one of the many birth defect cases with very tragic and financially heavy consequences. It concerns a case whereby the plaintiff was born on 1 December 1992 at 3.55 p.m. without complications. The next day the patient's mother developed a temperature and a bacteriological test showed that the delivery channel was occupied with streptococcus. The same day, 2 December 1992 at about 10.30 p.m. the baby itself had difficulties as well. At 11.40 p.m. she showed seizures. The next day, 3 December at about 1.15 a.m., the plaintiff had a second seizure. At 2.30 a.m. he was transferred to the pediatric unit of the hospital where the right antibiotic therapy was started. The baby itself was finally diagnosed with streptococcus and meningitis and is suffering from severe brain malfunctions as a result.

The claim of various experts appointed by the court is that the baby has been taken too late to a children's hospital and the experts decide that it can be assumed that the damage would not have occurred or would not have been as severe if the baby had been transferred in time. But at the same time the experts stated that there is no definite possibility to decide in retrospect whether the medical problems which the patient shows now could have been avoided if she had been transferred in time.

The court holds that the decision not to move the baby earlier to a child's hospital was faulty. The court relieves the plaintiff of the burden of proving that her life has been severely impaired as a result of the faulty medical treatment she has received. The defendants could not produce evidence that the damage could not have been influenced by appropriate medical treatment and since a severe faulty treatment has been proven the uncertainty with respect to the causal link is held against the defendants who are found liable to pay an amount of 500,000 DM (255,646 EUR) for pain and suffering, as well as other heads of material damage. In addition substantial claims from social insurance carriers are awarded as well.

Case 4 deals with a patient who received an operation on the hip, during which a catheter was positioned on the right arm, providing an infusion. After the operation the patient was suffering from permanent plexus paresis of the right arm. A team of experts examined both the selected method of positioning the catheter as well as the abduction angle. The method chosen was considered to be correct, but according to the experts an abduction angle of 70 to 80% would have sufficed, whereas an abduction angle of 90% was chosen. The German court holds that the plexus paresis of the infusion arm must have been caused by the improper positioning since other causes of injury are not appar-

ent. Hence, the burden of proof is reversed and the health provider needs to prove that the injury has been caused by another cause. Moreover, the hospital did not document the type of positioning, which could provide details on the abduction angle used. Hence, the German court holds this lack of documentation against the hospital and awards 110,000 DM (56,242 EUR) compensation to the patient.

Case 5 deals again with a birth defect: the mother of the plaintiff received CTG monitoring in the defendants' hospital twice a day, but not permanently. A caesarean section was performed. The plaintiff apparently has suffered brain damage as a result of an acute lack of oxygen in the mother's womb. He claims that this could have been avoided through a permanent CTG monitoring, which would have shown the lack of oxygen. The experts appointed by the court found that the caesarean section should have been performed earlier or that at least there should have been a continuously monitoring by CTG.

The German court again holds the defendants liable for faulty treatment in this case on the basis of the reasons given by the experts (too late performing of caesarean section and failure to monitor permanently via CTG). The hospital held that no other CTG equipment was available, but the German court holds this against the hospital. It is considered a breach of a contractual obligation not to possess sufficient technical equipment. Hence the German court rendered a judgement whereby an amount is awarded for pain and suffering, material damages and to social insurance carriers.

Case 6 deals once more with birth defects. The mother of the plaintiff went to the hospital on 7 February 1985 to the obstetrics division where she was admitted around 8.00 a.m. At 8.30 a.m. a CTG was applied, but the CTG strip is no longer available. Another CTG examination took place around 9.00 a.m., all in presence of the midwife. The midwife notified the third defendant. After examining the mother he notified the fourth defendant (the assistant medical director on duty). Then it was discovered that there were no cardiac sounds of the child and a rush caesarean was executed. There was no heart action, but the plaintiff could be reanimated. As a result the patient shows heavy mental underdevelopment.

The experts appointed by the court indicated that the midwife interpreted the second CTG strip (of 9.00 a.m.) too favourably. The problems were, according to the experts, caused by a complete placenta detachment which did not take place before 9.30 a.m. The lack of oxygen which resulted could suffice to cause the cerebral injury, so the experts held.

The German court holds that the hospital was obliged to keep complete patient records for at least 10 years. Hence, the hospital can be blamed for not being able to produce the first CTG strip. This is essential since the wrong interpretation by the midwife of the second CTG strip probably also applied to the (missing) first CTG strip. Hence, the German court holds the hospital liable for the damage, but the suit brought against the midwife and the other defendants is dismissed.

b) Norm for Professional Behaviour

In these cases 3–6 a variety of relevant legal issues concerning medical malpractice play a role. One of the crucial issues in each of these cases is obviously by what norms and standards one should judge the professional behaviour of the particular health care provider. Although the formulation of these norms may be different in the various countries, there were strikingly few differences between the countries when it came to answering the question whether there was wrongful behaviour of the health care provider in the particular cases concerned. One of the reasons for this seeming unanimity with respect to the cases discussed (at least as far as the finding of wrongfulness is concerned) has of course to do with the fact that in each of these cases there had been expert opinions who clearly indicated that the behaviour of the defendant violated the applicable legal standard: one can notice that many country reporters agree that judges will heavily rely upon the opinion of experts to determine whether in a particular case the defendant violated the professional norms.

As far as the definition of the professional norms themselves is concerned there are, at least on paper, a few differences. In the Netherlands, again, the norm can be found in legislation. Article 7:453 of the Dutch Civil Code provides explicitly that in the exercise of his activities a health care provider shall exercise the level of care expected from a conscientious health care provider and that he shall act in accordance with the responsibility following from the professional standard for health care providers. A similar formulation can be found in France where it is stated that a physician should provide his patient with conscientious, attentive and up to date medical care[41].

Interestingly, most legal regimes discussed in the country reports still adopt a fault regime for medical malpractice, whereby the fault consists in not following the required professional standards. However, France has adopted a strict liability in a few Cour de Cassation cases of 1999 as far as the liability of physicians and hospitals for iatrogenic infections is concerned[42]. In Belgium the question will be asked whether the physician has used reasonable care and skills according to the status of the medical research. It will be analysed whether the physician acted as a prudent and competent physician. In Austria an objective standard of care has been laid down, which is the level of care applicable for the careful professional[43]. The question will therefore be asked whether the health care provider followed the standard of care one can require from a careful colleague from the same specific area and experience.

Similar formulations describing the standard of care for professional health care providers can be found in the other country reports. But, as was mentioned before, when the facts of the case are clear, usually the contents of the professional norm is not the main problem. See in this respect for instance case 6 where the German court held at various instances that the midwife violated general obstetric rules which hold that as soon as a CTG shows peculiarities she has to call in a doctor (the same was mentioned in the Austrian report as well).

[41] Supra p. 103.
[42] Supra p. 113.
[43] § 1299 ABGB, *see* supra p. 72.

c) Financial Limits as Excuse?

Obviously a question which will have to be discussed in more detail is how a violation of the professional norm should be proven. There is, however, one interesting aspect concerning the contents of the professional norms, which needs to be mentioned at this stage. This concerns the question whether health care providers can be requested to comply with professional norms at all costs. This question has received some attention in the literature, given the increased technical possibilities of the modern medical science. There are many more technical possibilities of medical treatment than before, but the price has become very high as well. The question therefore arises whether it can be considered wrongful not to give a particular patient a specific, although very costly, treatment.

This issue played some role in the context of case 5 where the hospital argued that it could not be blamed for not having performed a constant CTG monitoring, since there was no other CTG-machine available. Can limited financial and technical resources be invoked as a ground of excuse by the health care provider?

The country reports, which discuss this issue, usually deny this. In the Dutch report it is stressed that the court might in such a case have to answer the question what kind of instruments a reasonably well equipped hospital should at least have available. Moreover, in the specific German case 5 the hospital did not show why the CTG-instruments it possessed had to be divided in such a way that no CTG measurement was possible of the mother of the plaintiff. The excuse therefore was relatively weak in that particular case 5[44]. The French report mentions that when the CTG-equipment could not be provided the hospital would certainly be held liable for insufficient staff or defective organisation. An insufficient number of CTG-equipment would thus, according to French law, constitute a breach of the hospital's duty of care[45]. In Austria it seems rather evident that in judging whether an objective duty of care has been breached, the financial limits do play a role[46]. Interestingly enough the English report discusses the issue whether financial constraints (for instances in major public hospitals) may be advanced as an excuse for not having specific equipment available. A case is cited[47] in which it is apparently accepted that financial limits put certain restraints on the possibility to provide medical services (though the context was not malpractice in the ordinary sense). The English reporter, however, criticises any attempt to widen this into a general excuse of scarce resources and holds that a hospital must take care to provide the level of service and facilities appropriate for a hospital offering the specific type of service. But again, as to this specific case 5, the English reporter agrees that it is not clear why the particular hospital could not allocate the CTG-equipment it had in such a way that the plaintiff's mother would have enjoyed the CTG-

[44] Supra p. 169.
[45] Supra pp. 117–118.
[46] *See* Koziol, H., *Österreichisches Haftpflichtrecht,* Band I, Allgemeiner Teil (3rd edn. 1997), no. 4/32.
[47] *See* the reference in footnote 42 of the English report, supra pp. 236–237.

equipment. Case 5 seems therefore more to be one in which the hospital did not get its equipment – use – priorities right, instead of one where the equipment would not be available because of limited financial resources. The Dutch reporters suggest in this respect to apply the test of the reasonably prudent and well equipped[48] hospital, following the example of the "Bonus pater familias".

d) Burden of Proof of a Violation

As was indicated above, in most cases the legal systems discussed apparently have less problems in identifying what the appropriate medical standard is. This decision is often based on technical advice of medical experts. Difficulties of proof arise often when it comes to the issue whether a particular health care provider violated the professional standard in a particular case. Again, that is usually no problem if it is perfectly clear what happened (see e.g. case 5 where the experts agree that in violation of the professional standard the caesarean was executed too late and there was no permanent CTG-monitoring). Difficulties arise more particularly when the facts are not clear, such as in case 4. In those cases the question always arises who has the burden of proving the violation of (or compliance with) the professional standard. The issue in case 4 was more particularly that there was no documentation concerning the type of positioning of the catheter, nor were there any details concerning the abduction angle used. This is a particular difficult case for the patient since he has no proof of any wrongdoing by the health care provider, so that it is not clear at all whether his current status is the result of a professional fault or of another cause (the latter is obviously an issue of causation as well).

Some legal systems, like the German legal system in case 4, seem to go a long way in the direction of the patient in helping him providing the evidence of a medical fault. Dutch law has as starting point the rule that the victim has to prove his claim, but a result oriented approach is applied as well. The Dutch country reporters argue that since the damage (plexus paresis) has arisen shortly after the operation and it has not appeared that such a damage can emerge spontaneously, it is possible to assume that this damage has been caused during the operation as a result of a medical fault. This is moreover so since the patient was during the operation obviously under narcosis and has hence no possibility to find out himself how the damage could have materialised[49]. A similar "patient-friendly" approach with respect to the burden of proof follows from French law. The French report argues that formally the burden of proving the fault is still on the plaintiff, but that the courts help patients by accepting the proof on the basis of factual presumptions. Moreover, the French court could also look at the elimination of all causes other than medical malpractice and after having excluded all of them, draw the conclusion that the damage must be caused by medical malpractice. The French report, however, indicates that in this particular case this "preuve par exclusion" will probably not help, since it was left open whether the injury could have stemmed from a predisposition of the patient.

[48] Supra p. 169.
[49] Supra pp. 161–162 and 168.

Although using different wordings, the English approach of "res ipsa loquitur" can help the patient in the particular case as well. The basic idea is that the patient argues that "an accident like this does not happen in the normal course of things without negligence". This then leads to a presumption, which can be rebutted by the defendant by showing that the damage actually was caused by another cause[50]. Although England does not have a formal reversal of the burden of proof (as in Germany or in the Netherlands) the patient-friendly *res ipsa loquitur*-rule may amount to the same result. The patient does not have to prove formally a violation of the professional standard by the health care provider; it is sufficient that he points at the result and shows that such a consequence does not ordinarily occur in the absence of negligence.

This approach with factual presumptions, supporting the plaintiffs case has also been followed in some Swiss cases[51], although it is considered heavily debated in that country. Switzerland seems reluctant against factual presumptions, which could lead to a "probatio diabolica" for the health care provider. Also Portuguese law follows a presumption of fault on the basis of article 799 of the Civil Code.

In the discussion of case 4 the Austrian country report indicates that Austria, unlike Germany, still requires the proof of the fault, in the sense of a wrongful behaviour of the health care provider. There is in this particular case no proof of such a fault of the health care provider. However, in case 4 there would also be liability of the health care provider under Austrian law, but for a different reason, having to do with the fact that documentation was lacking.

e) Lack of Documentation

Indeed, one of the crucial issues in case 4 was the fact that the hospital itself had not kept any evidence of the way in which the catheter had been positioned or concerning the abduction angle used. The Austrian reporters therefore hold that the fact that no adequate documentation was available may lead to a reversal of the burden of proof[52]. Also in the Netherlands it was argued with respect to case 4 that the health care provider should have noted the type of positioning and the details of the abduction angle in the documentation. This could, according to Dutch law equally lead to a reversal of the burden of proof[53].

The problem of a lack of documentation also played a role (and maybe an even more decisive one) in case 6. In that case the difficulty was that the first CTG-strip was missing, whereby the second (available) strip was according to experts misinterpreted by the midwife. This fact counted heavily against the defendant for the German court which decided case 6. Also reporters dealing with other countries point at the importance of the duty to keep adequate documentation. In the Netherlands the duty to keep adequate documentation is, once more, laid down statutorily. Article 7:454 of the Civil Code specifies in detail that the health care provider shall open a file concerning the patient's treat-

[50] Supra pp. 233–235.
[51] Supra pp. 216–217.
[52] Supra p. 76.
[53] Supra p. 168.

ment. It equally provides that the health care provider should keep notes of data concerning the patient's health in this file. The fact that, in violation of this article, the CTG-strip can not be provided, is according to the Dutch reporter of crucial importance. According to the Dutch Supreme Court the health care provider must provide sufficient data to back-up his argument against the position of the patient; otherwise the burden of proof will be reversed[54].

The French report also points out that the hospital is under a duty to keep the medical records of patients and the missing of one document could well be interpreted as an indication of a willingness to hide the truth. In such a case evidence of medical malpractice can well be produced on the basis of "serious, precise and concurrent presumptions". Thus, the French court could infer the unknown fact (misinterpretation of the first CTG-strip) from the significant known facts of the case, according to the French reporter[55]. The Swiss solution deviates from the German one in that the Swiss reporter indicates that in case of a violation of the duty of documentation there is no automatic reversal of the burden of proof[56]. According to Swiss law the treatment failure (too late caesarean) should therefore be established by other evidence. However, the fact that the documentation concerning the first CTG was missing could also under Swiss law have consequences for the duty of co-operation concerning the provision of evidence for the defendant. Austria pointed first of all at the legal duty of hospitals to keep record of all documentation concerning a patient for at least ten years. The failing documentation would under Austrian law lead to a reversal of the burden of proof[57].

f) Causation

In some cases (4 and 6) the issue is especially how proof can be brought of any malpractice of the health care provider. But if the issue of proof of a medical mistreatment is solved in those cases there was no serious issue concerning the causal link, although the country reporters indicate that this causal link must obviously still be proven. But for instance in case 6, the expert evidence made clear that if one accepts that the midwife also misinterpreted the first CTG, this fault stands in a causal relationship with the harm. For if she had acted immediately after the first CTG, the caesarean could have been performed much earlier before the fetal placenta detachment with the lack of oxygen occurred.

In other cases there is more debate concerning the proof of causation[58]. The issue of causation plays inter alia a role in case 3. It is indeed not absolutely certain that, had the child been transported earlier to a child hospital, her chances of surviving without brain damage would have been substantially larger. The Belgian report makes clear that the *conditio sina qua non*-test has to be fulfilled: if the damage would have occurred, even if the baby would have been

[54] Supra p. 170.
[55] Supra p. 119.
[56] Supra pp. 218–219.
[57] Supra pp. 80–81.
[58] Some general differences in the way the countries deal with causal uncertainty have already been discussed above in relation to cases 1 and 2.

transferred in time, there would be no causal link[59]. The Dutch report on the other hand makes clear that there is at least a chance that the baby would not have suffered severe brain damage if she would have been transferred in time. This means that although there is no certainty concerning a *conditio sina qua non*-relationship, according to the Dutch report the patient is entitled to compensation for the loss of this chance of a life without brain damage, had she been taken to the child hospital on time. The Dutch reporters estimate this chance at a percentage which will have to be determined by the court.

A similar approach is obviously followed in France. Given the fact that there is no *conditio sina qua non*-relationship, under French law the patient would not have been entitled to full compensation in case 3, but again for the loss of a chance. According to the French Cour de Cassation this loss of a chance equals a percentage (representing the extent of the lost chance) of the damages which would have been awarded if the plaintiff had been entitled to full compensation. The "loss of a chance"-doctrine would also be applied in Portugal in case 3. Other countries require more certainty concerning the causal link, but then award full compensation. This is for instance the case for English law where it is required that it should be "more probable than not" that taking the baby in time to a child hospital would have avoided the brain damage. If this likelihood is on a balance of probabilities higher than 50% the plaintiff can claim full compensation. In Switzerland it is held that the burden of proof of causation is lowered down in cases of serious mistreatment by the health care provider[60]. In that case a preponderant likelihood suffices for causation. Also Austrian law accepts alleviations of the burden of proof in causation in these cases. The plaintiff is not required to provide an absolute certain proof of the causal link. The Austrian report describes that if it is very likely that the damage would not have occurred without the fault, full compensation can be claimed. It would be possible for the plaintiff to recover a part of his loss, which is the usual rule of so called "alternative causation".

Again, the countries are rather divided on this issue of causation. Where some go in the direction of a proportional approach (even though it takes the form of "the loss of a chance"-doctrine), others still follow the "all or nothing" approach, but alleviate the burden of proof of causation for the patient.

Similar issues played a role in case 5. This was the case where as result of a late caesarean -again- permanent brain damage to the baby took place and the court held that as a result of no permanent CTG-monitoring and a late caesarean this damage was caused.

g) Results of the Cases

This overview shows that the legal issues at stake in cases 3–6 lead to differing results in the various countries. Moreover, it is interesting to summarize what the practical outcome would be according to the reporters of the various cases. Again, we will not mention all countries discussed in the report, but provide a

[59] Supra p. 96.
[60] Supra pp. 219–220.

few examples to show that outcomes may differ, although the reason for these differences may vary as well.

i. Case 3

The practical outcome of case 3 has been presented in the case[61]. It was shown that a full liability of the health care provider is accepted. The defendant is bound to pay capitalized damages for pain and suffering of 500,000 DM (255,645 EUR), material damage and substantial claims by social insurance carriers, whereby the total claim is almost 3.000,000 DM (1,533,876 EUR). The German country report makes clear that this seems to be in line with general German case law, although the amount of damages for non-pecuniary loss seems to be considered as relatively high[62].

The outcomes in the other legal systems differ, not so much as far as the issue of wrongfulness is concerned (expert evidence had declared that the plaintiff had been brought to a child hospital too late), but especially as far as the issue of causation is concerned. The German court apparently uses an "all or nothing" approach as far as causation is concerned, which leads in this case to a full liability of the defendant. The Belgian report indicates that the causation is not certain. If the damage would have occurred, even if the plaintiff had been transferred in time, there would not have been causation, since the tort would not have been *conditio sine qua non* for the damage. The Dutch would apply, as indicated above, a "loss of a chance" approach, meaning that the plaintiff would only be able to recover a part of his damages. Moreover, the Dutch report indicates that compensation for pain and suffering in this case would only amount to (a percentage of) 250,000 DM (127,823 EUR). The highest amount which was ever awarded in the Netherlands for pain and suffering is 300,000 DM (153,388 EUR). Also the French report would only have awarded a partial compensation (for the lost chance) but no full compensation. The same is true for Portugal, where it is equally indicated that the amount for pain and suffering would have been lower than in Germany. The English and the Austrian report indicate that an all or nothing approach would have been applied. If the tort is thus considered *conditio sine qua non*, the plaintiff is entitled to full compensation, but again both reporters indicate that the amount of pain and suffering seems relatively high. The English reporter believes that 350,000 DM (178,952 EUR) would be more likely, whereas the Austrian report mentions an amount of 250,000 DM (127,823 EUR).

As far as case 3 is concerned, the countries are hence divided on the issue of causation, which may have a significant impact on the actual outcome. All reporters, however, seem to indicate that the amount for pain and suffering would be lower than the 500,000 DM (255,646 EUR) the German court awarded.

ii. Case 4

As was mentioned above in this case the German court held that since there was no proof of other causes it must have been the improper positioning during the

[61] Supra pp. 18–19.
[62] Supra pp. 132–133.

operation which must have caused the plaintiff's loss. An amount of 50,000 DM (25,565 EUR) for pain and suffering was awarded, as well as 60,000 DM (30,678 EUR) for material damage. The Belgian, Dutch and English report seem to indicate, for different reasons, that there would be liability according to their law in this case as well. Austria would probably accept liability for the failure of adequate documentation. Again, the Austrian report however indicates that the amount of damages would be lower.

The French reporter believes that according to French law in this case there would be no liability. A "preuve par exclusion" may lead to liability, but predisposition as possible cause of the damage has not been excluded.

iii. Case 5

In case 5 the German court held the health care provider liable because of a lack of adequate CTG-monitoring of the heart rhythm and for the late performance of surgery. The hospital is held liable for the fault of the chief doctor and substantial amounts of damages are awarded. An amount for pain and suffering for this severely handicapped plaintiff of 250,000 DM (127,823 EUR) is awarded as well as are other heads of damage, including claims of social insurance. In total an amount of approximately 2,300,000 DM (1,175,971 EUR) is awarded.

There do not seem to be many differences as far as the practical outcome is concerned in this case. Both Belgium and the Netherlands accept that in this particular case there would be liability of the hospital (although for different legal reasons). Portugal also indicates that there would be liability, but that the amount would be substantially lower. The damages for non-pecuniary loss would be rather higher in England. The country reporter points at the vicarious liability of the hospital, but indicates that there is no reversal of the burden of proof as far as causation is concerned, which the German court seems to apply. The actual outcome in England remains therefore uncertain. Also the French report points at the difficulties of proving causation. Factual presumptions may help the plaintiff, but if the caesarean could not have been performed earlier at all, then it is argued that the permanent CTG-monitoring could not have avoided the loss. If that were the case, there would be no *conditio sine qua non* connection and French law would deny liability. For that reason the Austrian reporters indicate that, given this uncertainty concerning causation, the plaintiff might only be awarded a part of his damage. Again, the Austrian reporters indicate that the amount for pain and suffering would be substantially lower in Austria than the amount the German court awarded.

iv. Case 6

In this case, where the midwife violated obstetric rules (misinterpretation of the CTG strip and omittance to call in a physician in time), the German court accepted only liability of the hospital, not of the other three defendants (for various reasons). The German court awarded the plaintiff 170,000 DM (86,920 EUR) with 4% interest since 10 February 1992 and a pension retroactive from 1 January 1992 of 600 DM (307 EUR) per month.

Also as far as this case is concerned, the country reports seem to differ. Dutch and Portuguese law point at the liability of the hospital (for different reasons), mainly because of the lack of appropriate documentation (the first CTG strip was missing). Portugal, in addition points (as only country) at the liability of the chief doctor (defendant 4), because of his duty of supervision, whereas the Netherlands point at the central liability of the hospital. In the Dutch Civil Code the liability for medical malpractice is centralized to the hospital. This is, however, not an exclusive liability of the hospital; it can be combined with the liability of e.g. the health care provider. In France, on the other hand, the midwife can also be held personally liable in addition to the vicarious liability of the hospital. England and Switzerland on the other hand, reject the view that there is a reversal of the burden of proof because of the violation of the duty to keep adequate documentation. However, the English report suggests that the court might well infer that the missing strip indicated that action should have been taken.

3. Comparative Results

a) Statutes and Case Law

The main differences and similarities between the legal systems have already been outlined above. The main goal of this exercise was to examine whether one similar case would lead to different outcomes in the different legal systems and if so, for what reasons. The comparative overview showed that the outcomes do indeed differ considerably, although probably for different reasons than one would expect at first sight. There are obviously some noteworthy differences in the legal structure. In this respect one can point at the fact that e.g. the duty of care of the health care provider and the relationship with the patient are extensively regulated in e.g. the Netherlands in the Dutch Civil Code, whereas the contents of medical malpractice law is more the subject of evolutions in case law in countries like Belgium, France, Portugal, England, Austria and Switzerland. In addition one can point out specific statutory regimes, for example the Swedish Patient Insurance Act. Moreover, a peculiarity of the French regime is the difference between the public and private law regimes, with a strikingly strict standard for public hospitals. However, these differences (mainly as far as the sources of law are concerned) do not seem to play a major role as far as the differences in actual outcomes are concerned. This is also the case for the contract-tort boundary. Obviously, many country reporters indicate that in some cases medical malpractice is based on tort; in other cases it has a contractual basis. But the difference between tort and contract does not seem to lie at the basis of some of the major differences in the actual outcomes of cases.

b) Disclosure of Information

The same seems to be the case as far as the basic principles of medical malpractice law are concerned. Take e.g. the issue of disclosure of information. The German and the Swiss[63] reports rightly point at the fact that this is becoming an

[63] Supra pp. 203–205.

increasingly important source of liability since it is obviously much easier for a patient to show that he has not been properly informed about specific risks than to show that he was wrongfully treated by a physician. Again, most legal systems seem to agree that in principle patients have to be informed adequately concerning the specific risks of a test or treatment. All also seem to agree that without a proper consent a medical treatment is principally unlawful. All reporters also seemed to agree that the information should be timely, in a language which the patient can understand and oral (a written informed consent form as such is never accepted as sole proof of appropriate information, if not accompanied by an oral explanation). However, when it comes to the question for what kind of particular risks the health care provider has to warn the patient the countries differ. This is especially the case when it concerns low probability (exceptional) risks, but with serious consequences, once they occur. Some countries seem to indicate that there is no duty to warn for these exceptional risks; others indicate that there is such a duty, provided that the consequences are indeed of a serious nature.

c) Standard of Care and Burden of Proof

As far as the care to be required from the health care provider is concerned, again there seems to be unanimity as far as the main principles are concerned. Remarkably most legal systems apparently are still based on a negligence rule, meaning that the health care provider is in principle not strictly liable[64]. All systems therefore apparently still have a negligence rule and – at least formally – no system has adopted strict liability for medical malpractice[65]. Also as far as the question is concerned what care one can require from a physician, the reporters seem to agree on the principles that the standard will be constituted by the normally careful physician. Differences occur, however, when it comes to procedural matters, e.g. concerning the question how the victim can prove a violation of such a standard of care. Some legal systems are very "victim-friendly" and allow the victim to prove the fault on the basis of factual presumptions; others do not accept this. These differences concerning the burden of proof explain some of the varying outcomes of the cases which were discussed. It is therefore striking to note that there are not so much differences in the material medical malpractice law which cause different outcomes, but differing procedural aspects (e.g. concerning the burden of proof)[66].

Obviously other procedural differences may play a role as well. In this respect one could think of the possibility to provide Alternative Dispute Resolution (ADR) to patients. ADR-schemes, which exist in e.g. Austria and Germany, might lower the costs for the patient to claim compensation and may hence increase the number of claims. However, the Dutch insurer MediRisk claims

[64] This is even the case in the Swedish system, although the tort act is supplemented with the patient insurance.

[65] With the exception of France and Switzerland, where strict liability applies in some cases in public law.

[66] Obviously the reversal of the burden of proof is not merely an aspect of procedural law. In fact it constitutes – at the material law level – a step between negligence and strict liability.

that a – limited[67] – ADR regime in that country did not lead to a substantial increase in the number or claims[68].

d) Causation

Crucial differences also appeared as far as the important issue of causation is concerned. This obviously is not specifically related to medical malpractice, but is an issue of general tort law. When there is uncertainty concerning the issue of causation some require that it must have been "more probable than not" that the wrongful act caused the damage (51%). If that requirement is met the plaintiff gets full compensation; if it is not the case, he gets nothing. This is therefore often referred to as the "all or nothing" approach. Others award the plaintiff a proportion of his damage, based on different legal techniques, the French doctrine of "loss of a chance", being an important one. These different standards of causation caused also different outcomes.

e) Channelling of Liability?

In addition there were differences at the material legal level, as far as the issue of who is liable (especially within an institution or hospital) was concerned. All legal systems usually agree that the hospital is (based on different legal constructions) liable for medical malpractice which occurs within its walls. There are, however, differences on whether the plaintiff can also sue the health care provider who actually performed the test or treatment which gave rise to the loss.

f) Non-Pecuniary Loss

This shows that the differences as far as the finding of liability is concerned are not that much caused by differences in material medical malpractice law, but mostly by differences as far as the requirements for causation or procedural rules (burden of proof) are concerned (although the latter are also closely related to material law). Moreover, there were also differences in the amount of damages. With a few exceptions (for instance England) all legal systems showed that the amounts awarded for pain and suffering in Germany seemed to be very high. This, once more, indicates that the exposure to liability will to a large extent depend upon an issue which is independent of medical malpractice law, being the question how courts asses non-pecuniary losses. This conclusion, being that the amounts awarded for non-pecuniary losses largely differ, was also reached in another recent research of the European Centre for Tort and Insurance Law[69]. To some extent the difference in the amounts awarded for non-pecuniary loss may be due to the differences in levels of the social security schemes[70].

[67] The system only applied to "small" claims, up to a value of 3,403.35 EUR (7,500 NLG).

[68] *See Welwezen*, February 2000, pp. 12–13.

[69] *See* Rogers, H., Damages for Non-Pecuniary loss, *preliminary report*, Munich, 28–29 April 2000.

[70] *See* Faure, M. and Hartlief, T., Towards An Expanding Enterprise Liability in Europe? How to Analyze the Scope of Liability of Industrial Operators and their Insurers, [1996] *Maastricht Journal of European and Comparative Law*, vol. 3, 235–270.

g) Social Insurance Carriers

Finally, the exposure of the health care provider (and his insurer) will, as the German cases showed, also be dependent upon the question whether there is a right of redress of social security institutions or not. The scope of liability will inevitably be much lower in countries where such a right of redress either does not exist or is limited (like in the UK) than in countries where, such as Germany, social insurance carriers apparently can fully use tort law to recover the amounts paid to the patient. For instance from the English report it becomes clear that there is currently no right of recourse for the National Health Service (except for a limited right in respect of treatment for road accidents)[71]. Only where the victim has received money benefits the state has a right of recoupment for a five year period.

This issue of the existence of a right of redress for social insurance carriers is independent of material medical malpractice law, but will have an important impact on the financial distribution of the medical malpractice bill.

Indeed, if most of the costs of medical malpractice would be borne by the social insurance system and no redress would exist or would be exercised, the actual scope of medical malpractice for the health care providers and their insurers would be relatively limited. If, on the other hand, social insurance carriers would actively use liability law in an attempt to shift the costs to the health care provider and his insurer the actual scope of liability might be totally different.

Since the cases did not specifically address the issue of redress we did not develop this part in detail within the scope of this project. Nevertheless some differences appeared e.g. between England on the one hand where the right of redress of social insurance carriers is limited and countries like Belgium and Germany on the other hand, where a full right of redress exists. These differences are obviously important since they may have a strong economic impact. Moreover, one may wonder whether a European harmonisation attempt would make sense if this would only touch upon material medical malpractice law and would not address the issue of the right of redress. We shall discuss this point below.

h) Germany: Patient Protection on Top!

Finally, it seems important to indicate that the various legal systems could be judged on the basis of different criteria in the protection of patients. One generally notices that although some countries go for example a long way in protecting victims as far as causation is concerned, they compensate this with for example lower amounts for pain and suffering. One country, however, notably Germany, seems to benefit the patients on all accounts. The German cases showed that the courts come to the help of victims by a reversal of the burden of proof, by accepting factual presumptions and by accepting proof of causation easily as well, which will inevitably easily lead to a finding of liability. In addition, Germany seemed to be at the top as well as far as the amounts for pain and suf-

[71] *See* Appendix I under I.6. of the English report, supra p. 240.

fering were concerned and as far as the rights of redress of social insurance carriers are concerned. This inevitably leads to the conclusion that in a European perspective, the German legal system seems to provide a very far reaching compensation of victims of medical malpractice. Although this obviously may largely satisfy the interests of patients, there is unavoidably a price to be paid for this far reaching protection. Hence, we will have to turn now to economic analysis to determine the price of this patient protection.

C. A Few Economic Observations

1. Introduction

One of the goals of this comparative exercise was to analyse the differences between the legal systems examined, also from an economic point of view. This seems interesting since in the economic analysis of law a lot of attention has been paid to medical malpractice law.

The basic idea in the economic analysis of law is that legal rules should give the physician or the hospital incentives to invest in care in order to prevent damage. One of the important questions in law and economics is therefore through what kind of legal rules the health care providers can be given appropriate incentives for optimal care. Second, the question is also addressed how optimal compensation can be awarded when damage occurs. We will address both of these issues briefly in these comparative conclusions.

2. Effects of Increased Liability

a) Liability as an Incentive System

An important question which one has to ask in the context of medical malpractice is who eventually bears the costs of an increased level of compensation to the victims. This question is of particular importance in the German context since we have noticed that, both as far as the duty of care is concerned as well as concerning the level of damages, Germany seems to take a "top" position within the countries we have examined in this report. In addition to the question how this affects the German position within Europe, one can also address the question whether this increased protection can be defended on economic grounds and who finally has to bear the financial consequences of this increased protection.

As far as the economic effects of expanding liability is concerned, we already mentioned that economists consider the liability system as one which should give incentives for appropriate care to health care providers[72]. The idea that the potential injurer will have to compensate his victim is supposed to have a preventive effect[73]. This preventive effect of liability rules is also stressed in

[72] These basic thoughts have been developed among others by Shavell, S., Theoretical issues in medical malpractice in Rottenberg, S. (ed.), *The economics of medical malpractice* (1978), pp. 35–64.

[73] Compare Schiemann, G., *Argumente und Prinzipien bei der Fortbildung des Schadensrechts* (1981), p. 185.

the context of health care. Thus, medical malpractice can basically be considered as a regime to give appropriate incentives to health care providers[74].

b) Negligence Versus Strict Liability

One of the questions which arises in this respect is whether a negligence rule or a strict liability rule should be used to provide these incentives for optimal care to the health care provider. Economic analysis has shown that in principle both a negligence rule and a strict liability rule can give these appropriate incentives for optimal care. If strict liability is considered as a legal rule, which forces the injurer to compensate the damage of the victim irrespective of the care he took, the injurer will invest in care to the point where the marginal costs of preventive measures equal the marginal benefit in a reduction of the potential loss. Hence, strict liability reaches an efficient solution[75]. However, strict liability assumes that the injurer (in this case the health care provider) knows the risks and the optimal preventive measures to reduce the risk. Moreover, strict liability is efficient only when the injurer has money at stake to compensate for the damage. In case of insolvency strict liability might not lead to an efficient outcome. An efficient outcome can, however, according to the literature also be reached under a negligence rule as long as the legal system equals the due care (required under negligence) to the efficient care level. In that case the potential injurer will adopt the due care the legal system requires from him in order to avoid to have to compensate his victim. Therefore equally the negligence rule can lead to an efficient result[76]. This result is important since it shows that it would be erroneous to promote the introduction of a strict liability rule under the argument that it would give better incentives for prevention to the injurer. From this it follows that, also in the context of medical malpractice, the fact that most legal systems discussed in this report still adopt a negligence regime for medical malpractice makes sense from an economic point of view. If this rule is applied correctly by the courts, a negligence system can give appropriate incentives for prevention to health care providers.

Obviously there is another reason why in some legal systems judges or legal doctrine plead in favour of either strict liability or a reversal of the burden of proof under negligence (see the situation in Germany). The reasons for these expanding liabilities of health care providers often have to do with the wish to provide full compensation to victims. Economic analysis, however, primarily considers liability rules as instruments of accident prevention, so that victim compensation is not the primary goal of tort law, at least in traditional economic analysis. Second, there is a certain danger, as will be shown below, that a strict liability rule can even lead to a negative redistribution. Third, a strict liability

[74] This preventive function of liability rules is, in the context of health care, among others stressed by Koziol, H., Die Arzthaftung im geltenden und künftigen Recht in *Haftungsrechtliche Perspektiven der ärztlichen Behandlung* (1997), p. 22 and also by Kötz, H., *Deliktsrecht*, (6th Edition, 1994), pp. 46–52.

[75] *See* Polinsky, A.M., *Introduction to Law and Economics* (1983), p. 339 and Shavell, S., *Economic analysis of accident Law* (1987), p. 8.

[76] *See* Shavell, S., *Economic analysis of Law* (1987), 8.

rule obviously has its weaknesses as compensation mechanism. Without solvency guarantees (e.g. compulsory insurance) a strict liability rule does not necessarily provide a guarantee of an optimal victim compensation. In addition: even strict liability does not guarantee an automatic liability for the injuries since the victim will still have to prove causation which is, as the cases showed, a crucial point in medical malpractice. Moreover, as we just discussed: in case of insolvency strict liability may lead to underdeterrence.

c) The Coase Theorem

There are, moreover, other reasons why one may question the effectiveness of expanding liability for health care providers. Economic analysis points to the fact that in many cases a patient is bound with the health care provider via a contract[77]. In that case Nobel Prize winner Ronald Coase has thought that an efficient allocation of resources will always follow, irrespective of the contents of the legal rule, as long as the transaction costs are zero[78]. The basic idea of the so called "Coase theorem" is that when parties are fully informed the liability rule will have no effect on the preventive measures to be taken. A classic application of the Coase theorem can be found in the context of product liability (for instance for pharmaceutical products). In that case the producer and the buyer (assuming that this is the potential victim) are bound to each other via the price-mechanism. This price can provide an indication concerning the division of risk (of harmful effects of the product) between the parties. In this case the Coase theorem teaches that when parties are fully informed a change in the liability regime will have no effect on the preventive measures. If the producer would not be liable for the damage caused by the pharmaceutical product, the well informed buyer would nevertheless add the expected loss (the risk) to the market price and hence only buy the product, taking into account the full price (which includes the risk) of the product[79].

The consequence of the Coase theorem therefore is that when parties are well informed, the contents of the liability rule does not affect the level of prevention. At first sight, this Coase theorem does not seem to have much importance for medical malpractice. Indeed: the Coase theorem assumes zero transaction costs, which in the context of medical care means that it is assumed that the patient is fully informed about the risks involved in a treatment. Obviously, the cases discussed above showed that this assumption is often unrealistic. As such, the fact that, as the cases have shown, many legal systems force health care providers to provide adequate information on risks, fits into the economic analysis. It may allow patients to make a better informed choice. The fact that patients often have little information on risks (or are not able to evaluate the risks, even when properly informed) is one of the reasons why regulation should intervene (in addition to liability) to regulate e.g. the quality of pharmaceutical products.

[77] This is the case even though medical malpractice is not always regulated on the basis of contractual liability.

[78] Coase, R., The problem of social cost, [1960] *Journal of Law and Economics*, 1–44.

[79] This has been developed by Oi, W.Y., The Economics of product safety, [1973] *Bell Journal of Economics*, 3–28.

However, the fact that there is a contractual relationship between a health care provider and a patient (or between a producer and a consumer of pharmaceutical products) still is important from an economic perspective, even in the cases when the patient can not be adequately informed. Indeed, it is often argued that the consumer (or patient) should be protected via a strict liability rule (or an extended negligence rule; see the reversal of the burden of proof). The Coase theorem teaches that such a protection will often have just a limited impact, at least when the health care provider will have the possibility to pass on this increased patient protection to the consumer via the price mechanism. This means that if e.g. case law or the legislator decide to shift to a strict liability rule, for instance for damage caused through pharmaceutical products, a producer will simply increase the price of his products with the fact that he now bears the potential loss. Thus the consumer in fact pays for the increased protection which is awarded to him.

This is the consequence of the Coase theorem: since parties are bound to each other via the price mechanism it is effectively difficult to "protect" a consumer/patient via expanded liability rules since this increased protection can be passed on via the price mechanism, so that in the end the consumer pays for it himself[80].

This leads to the interesting conclusion that one could argue that it probably makes little sense to introduce all kind of legal measures to "protect victims" as long as the "injurer" is able to pass on the increased costs of this protection to the consumer of the product or services. In addition economic literature has indicated that a major disadvantage of strict liability is that it provides for an increased "protection" for all consumers/patients, although it is not certain that this increased protection increases expected utility for all consumers/patients[81]. The problem is that provider-liability may lead to negative redistributional effects if the consumer-group is not homogeneous, but heterogeneous. The heterogeneity in the consumer group already exists because of the fact that there may be large income differences. Hence: a full compensation for victims in fact benefits to a larger extent the "rich" victims, since their income loss will be larger. However, given the Coase theorem, this increased protection, which benefits more the high income groups, will be passed on to all consumers. This means that all pay for an increased protection of the higher income groups, which is the negative redistributional effect, just mentioned.

The importance of the Coase theorem in the context of medical malpractice is that judges or legislators can, from a legal perspective, try to award an increased protection to victims (e.g. through a reversal of the burden of proof),

[80] These effects of the Coase theorem have been developed by Hamada, K., Liability rules and income distribution in products liability, [1976] *The American Economic Review*, 228–234; *see also* Calabresi, G., Transaction costs, resource location and liability rules: a comment, [1968] *Journal of Law and Economics*, 67–73. The same point has been made for Germany in an excellent paper by Adams, M., Produkthaftung – Wohltat oder Plage – eine Ökonomische Analyse, [1987] *Betriebsberater*, Beilage 20 zu Heft 31/1987, 1–24.

[81] This point has been made by Oi, W.Y., *l.c.*, pp. 3–28 and has been eleborated by Adams, M., *l.c.*, pp. 5–6.

but that as long as victims and injurers are bound via the price mechanism, the health care provider will be able to pass on this increased protection to the patient via the price of the services[82]. Obviously one should realize that the scope for truly free negotiations between a health care provider and a patient concerning the price of the services and the related risk will in practice not be large. One problem is the lack of information on risks of the patient[83]; another problem is that free negotiations on prices are excluded in many health care systems where the prices of health care services have been regulated through the influence of social security. It is nevertheless interesting to point at revolutionary proposals of e.g. Chicago Professor Richard Epstein, who suggested to solve the American medical malpractice crisis on the basis of contractual agreements between patients and physicians à la Coase. The basic idea of Epstein is that patients (or their representatives), physicians and hospitals would negotiate *ex ante* on the amount of care (preventive measures) to be taken by the health care provider and on the corresponding division of risks and would agree accordingly on the price to be paid for the services[84].

Although these ideas may not be immediately practicable to solve medical malpractice in Europe, some of the underlying concepts are highly interesting; particularly the fact that an increased protection of patients (via reversal of the burden of proof or a shift to strict liability) has financial effects which will somehow be passed on. The only question is indeed whether the legal regime gives possibilities for passing on these increased costs. In systems where health care providers are free to set prices for their services, an increased protection will lead to increased insurance premiums which will be passed on to the patients. In systems were prices are regulated the increased liability will either lead to higher costs for the social security system (e.g. when public hospitals are made liable) and will thus be spread to the general tax payers or to increased exposure of insurers for liabilities of their clients. This obviously poses the question what the effects of increased liabilities will be on the insurance level.

[82] For an analysis of medical malpractice from the perspective of the Coase theorem see equally Danzon, P.M., Alternative liability regimes for medical injuries, [1990] *Geneva Papers on Risks and Insurance*, 5–6.

[83] Which is, as mentioned above, a good argument for regulation forcing health care providers to disclose information on risks.

[84] *See* further on these highly interesting thoughts: Epstein, R., Medical Malpractice: the Case for Contract, [1976] *American Bar Foundation Research Journal*, Vol. 1, no.1, 119–413 and Epstein, R., Medical Malpractice: its cause and cure, in Rottenberg, S. (ed.), *The Economics of Medical Malpractice* (1978), pp. 245–267. He has elaborated his plea in favor of a market oriented medical malpractice in Epstein, R., Market and Regulatory Approaches to Medical Malpractice: the Virginia Obstetrical No-Fault Statute, [1988] *Virginia Law Review*, 1451–1474 and in his recent book Epstein, R., *Mortal Peril, Our Inalienable Right to Health Care?* (Reading, Addison-Wesley, 1997), pp. 412–416. This market approach is also defended by Danzon, P.M., *Medical Malpractice: Theory, Evidence and Public Policy* (1985) and by Robinson, G.O., Rethinking the Allocation of Medical Malpractice Risks Between Patients and Providers, [1986] *Law and Contemporary Problems*, 173.

3. Insurance

a) Curing "Moral Hazard"

Traditionally providers of health care services have covered their exposure to liability via liability insurance. Liability insurance poses the well-known problem of moral hazard, relating to the fact that the incentives for prevention will be diluted (or at least reduced) as a result of the simple fact that a certain risk is insured. In order to remedy moral hazard a liability insurer should, as much as (financially) feasible adapt the premium to the individual risk of his insured: rewarding good behaviour (efficient care) and punishing (via premium increases) "bad" behaviour[85]. Such a "risk management" is obviously only possible when the insurer possesses accurate information on the risk and thus has the possibility for an effective risk reduction. In addition to adapting the premium to the risk posed by the insured, the insurer can also cure moral hazard by exposing the insured partially to risk. One method for such an exposure is using a deductible; another one is putting an upper limit on coverage. When the insurer is capable of adequately controlling moral hazard, efficient insurance policies should be able to control the behaviour of the insured and provide incentives for prevention in the same way as tort law does[86]. In that case these incentives are no longer provided via tort law but through efficient provisions in the insurance policy. Such a control of moral hazard is obviously possible in the liability insurance for health care provision as well[87].

b) Towards an Insurance Crisis?

Can such a system of efficient liability insurance be endangered as a result of an increasing liability, which we can notice today in various legal systems? George Priest has argued that the insurance crisis in the United States (which plays a major role, also with respect to medical malpractice) has to a large extent been caused by the fact that the tort law system was increasingly used as an instrument of victim compensation. He pointed out the fact that the liability insurance crisis in the US was caused by the adverse selection process which results from an information asymmetry between insurer and insured[88]. Indeed, the insurer often has poor information on the precise qualities of the insured (there is therefore asymmetric information). If the qualities of these insured (whether they are good or bad risks) can not be signalled to the insurer, the average premium which the insurer will charge will be relatively too high for the "good risks"[89]. This may lead the good risks to leave the pool and finally to a total

[85] *See* for the basic principles of the control of moral hazard Shavell, S., On moral hazard and insurance, [1979] *Quarterly Journal of Economics*, 541–562.

[86] *See* Faure, M., Interdependencies between Tort Law and Insurance, [1997] *Risk, Decision and Policy*, 193–210.

[87] *See* Shavell, S., (supra note 42) pp. 40–42.

[88] *See* Priest, G., The current insurance crisis and modern tort law, [1987] *Yale Law Journal*, 1521–1590.

[89] *See* on this process of adverse selection Akerlof, G., The market for "lemons": quality, uncertainty and the market mechanism, [1970] *Quarterly Journal of Economics*, 488–500.

unravelling of risk pools. Priest argues that this process has been caused by an increasing use of liability as a compensation mechanism and lead to a crisis whereby for certain services liability insurance was not available any longer. Moreover, Priest argued that this crisis victimized especially the lower income groups, while the premium increases were especially caused by the higher income groups[90].

It seems important to learn from this American example that there are certain dangers in an expansion of medical malpractice from an insurance perspective. This is the more true if, as it is the case in many European legal systems, the liability insurer increases premiums as a result of expanding liability, but the health care provider has no possibility to pass on these increases to the patients, given price regulation of services. Obviously expanding medical malpractice should never endanger insurability or the provision of specific health care services.

There are obviously remedies, available to liability insurers, to cope with expanding liability. One remedy is an appropriate differentiation of risk. If the insurance policy requires preventive action from the insured party and provides for a corresponding reward in the premium, this should give optimal incentives to the insured for accident reduction. Thus risk pools should be constructed as narrowly as possible so that the premium reflects the risk of the average member of the particular pool[91]. An adequate risk differentiation obviously assumes that an insurer has adequate information on the risk. One of the answers for instance in the area of medical malpractice, which will enable a risk differentiation, is a specialization on medical risks. It is, as mentioned above, highly important for the liability insurer to be able to reward good risks for preventive action in order to prevent them from leaving the risk pools. In that respect a specialized broker can also play an important role to pass on information on risks from the health care provider to the liability insurers.

c) Self Insurance

One can, also in Europe, already notice that the expanding liability for medical malpractice leads to tensions in the liability insurance market. As a result of reduced possibilities to obtain liability cover some major hospitals have, e.g. in the Netherlands, moved to self insurance. What often happens is that major (especially public) hospitals self insure for an important amount and only purchase "excess" insurance for when liability would exceed a specific ceiling. Therefore, in practice a combination between self insurance and liability insurance, whereby the self insurance can take the form of a deductible, can be found.

Although this combined use of self insurance and liability insurance may, especially concerning the larger risks, certainly prove to be efficient, one has to warn that a total reliance on self insurance (meaning that health care providers would not purchase liability insurance any longer) has certain dangers as well.

[90] This is precisely the argument made above that a shift to strict liability will cause a negative redistribution.

[91] *See* Faure, M. and Hartlief, T., Remedies for expanding liability, [1998] *Oxford Journal of Legal Studies*, 697–699.

An obvious point is that victims still should have the guarantee that a health care provider who is found liable will also have the possibility to be able to pay the compensation due to the victim. Self insurance is not necessarily a waterproof guarantee against insolvency. Second, liability insurance has the major advantage that a risk spreading via so called "economies of scale" is possible. A liability insurer has the possibility to bring together similar, but unrelated, risks and can thus increase the expected utility of all insured by reducing their risk aversion. This major benefit of insurance (risk spreading) is obviously lost with self insurance. Moreover, liability insurance may have the advantage that a specialized insurer (or broker) can acquire accurate information on risk and can thus, via the insurance policy provisions, require specific preventive measures from the health care provider. Efficient insurance policies can thus lead to a reduction of the medical malpractice risk. Finally, a self insurance of health care providers (especially hospitals) can lead to redistribution problems. Assume that a public hospital would not purchase liability insurance. In that case they would simply run the risk of having to pay major amounts as a result of liabilities and would then pass on the costs to the tax payer and not necessarily to those who benefit from the services of the health care system. Passing on the risk to the tax payer is obviously only possible for public hospital. This could hence also lead to a distortion of competition between private and public hospitals.

In sum: there may be certain dangers in the tendency towards an increased use of self insurance (possibly as a result of expanding medical malpractice). It seems more "efficient" and "fair" to keep medical malpractice within reasonable limits, so that liability insurers can still cover these risks. If a specialized liability insurer can differentiate risks adequately, this should also provide optimal incentives for care to the health care providers.

D. ALTERNATIVES?

1. First-Party Patient Insurance

We have just shown that an expanding liability may lead to tensions in the liability insurance market. Moreover, we have equally indicated that self-insurance is probably not an optimal alternative. We should, however, remember that in Europe today a large part of the medical malpractice bill is still primarily paid by the social security system. To a large part liability law therefore either deals with the right of redress of those social security institutions or with damages for pain and suffering of victims. This, however, somewhat reduces the need to look for alternatives since victims today are already compensated for a large part of their losses via the social security system.

There is another alternative, which may compensate victims of medical malpractice, which is often advocated, being a first-party patient insurance. This phenomenon is extensively debated in the literature[92]. The major difference

[92] *See* on this tendency to no fault compensation schemes in the field of medical malpractice, Koziol, H., supra note 74.

between liability insurance and patient insurance is well-known. Liability insurance is a third-party insurance, whereby the insurer covers the risk that his insured (the health care provider) will have to compensate a third party. A patient insurance is considered a so-called first-party insurance, since in that case compensation is awarded directly by the insurer to the victim. Whether such a first-party patient insurance can be considered as an efficient alternative for third-party liability can not be answered in general terms. This depends to a large extent on the details of such a proposal and more particularly on the question whether the patient's insurance is combined or not with the liability of the health care provider. The underlying principle in a first-party insurance is that the insurance – in principle – pays as soon as damage occurs, provided that the victim can prove that his damage has been caused by the insured risk, irrespective of the fact whether there is liability of a third party. The advantage of a first-party insurance is obviously that the transaction costs are relatively low and that risk differentiation will be a lot easier. The reason is simply that the insurer covers directly the risk of the patient. It is therefore much easier for the patient to signal particular circumstances to the insurer than with a liability insurer. The problem with a liability insurance (a so called third-party insurance) is always that the insurer is insuring the risk that his insured (the potential injurer) will harm a victim (a third party) of which the properties are unknown *ex ante* to the insurer, whereas under first-party insurance the insurer directly covers the victim.

A question which arises in the context of first-party patient insurance is whether a causal relationship with a medical treatment is required. If such a causal link still would have to be proven by the patient, a first-party patient insurance might not necessarily be easier than the current third-party liability system. The problem is indeed that the compensation system should not be constructed in such a way that the patient is compensated as soon as he is unsatisfied with the result of the medical treatment[93]. Therefore, also in a so-called no fault compensation scheme it will be necessary to examine whether the damage suffered by the victim is the result of medical treatment[94]. Moreover, also in a first-party insurance scheme the question will have to be answered who finances the system. In principle, it is the patient who finances a first-party insurance. That is obviously a major difference from a liability insurance. It will obviously be difficult to "sell" a first-party insurance scheme when this has to be financed by the victims. This explains why most patient insurance schemes which either exist (such as e.g. in Sweden) or are discussed in the literature are not first-party insurance in the true sense, but more social security schemes. In those cases, it is the government which finances the insurance scheme. Indeed, since potential victims already pay for their protection against future losses, their willingness to contribute additionally to a first party scheme will prob-

[93] *See* for more details Koziol, H., (supra note 74) p. 31.

[94] The administrative costs of such a no fault accident scheme are, given this causation requirement, therefore not necessarily lower than the costs of the liability system, so Bowles, R. and Jones, P.H., *Professional Liability: an economic analysis* (1989), p. 71 and Epstein, R., Medical Malpractice: its cause and cure (supra note 84) pp. 257–258. This is, however, denied by Vansweevelt, Th., *l.c.*, pp. 875–876.

ably be low. Obviously one should avoid that a supplementary compensation scheme would only lead to more redress from social security institutions. Combined with liability insurance this may lead to an inefficient cumulation of compensation schemes.

Finally also under a first-party patient insurance scheme, the relationship to liability law will have to be cleared. One question is whether such a no fault patient insurance scheme would replace the liability system. That would therefore amount to a new regime whereby the liability system would be left. From the patient's perspective this would mean that the patient would receive a compensation with relative certainty (he still needs to prove causation with a medical treatment – which may not be easy –, but does not need to prove negligence of the health care provider), although the compensation will usually be lower than the full compensation awarded in tort law. From the health care providers' perspective the question arises how they would still have incentives for prevention without a liability system. Many have warned that a true no fault scheme without liability for medical malpractice would dilute the incentives for care of the health care providers[95]. If, on the other hand, the liability system remains to exist in addition to the patient insurance, this would lead to a cumulation of insurance, which can probably hardly be considered as efficient[96].

2. *Compensation Fund*

A related discussion, amounting to no fault compensation schemes, is based not on the idea of a first-party patient insurance, but on the idea of the instalment of a compensation fund for victims of medical malpractice. The tendency to install compensation funds instead of using liability law has also reached the area of medical malpractice[97]. The reasons advanced for such a compensation fund vary, but often it is argued that the traditional liability system with liability insurance is not able to provide full victim compensation and is therefore defective in that respect. The question, however, arises whether the administrator of a compensation fund will better be able to manage the medical malpractice risk than traditional insurance markets[98]. The crucial question is indeed whether the administrator of the fund is also able to recognize good and bad risks and hence, to carry through a risk differentiation in the same way a liability insurer would do[99]. As was shown above, insurance markets have proven to be able to provide adequate coverage for liability and it is not at all certain that an adequate risk differentiation could be performed more effectively by a (pub-

[95] This has been argued by Koziol, H., (supra note 74) p. 32 and by Danzon, P., *l.c.*, p. 13.

[96] So Koziol, H., (supra note 74) p. 31.

[97] Recently the idea was also launched in France to set up a "Fonds d'indemnisation des victimes d'accidents médicaux graves survenus en l'absence de faute des soignants", (*see Le Monde*, 17 February 2000, 19).

[98] For a critical analysis *see* Faure, M. and Hartlief, T., Compensation funds versus liability and insurance for remedying environmental damage, [1996] *Review of European Community and International Environmental Law*, 321–327 and *see* Faure, M., Economic aspects of environmental liability: an introduction, [1996] *European Review of Private Law*, 101–105.

[99] Shavell, S., (supra note 72) p. 40.

lic) compensation fund. This would indeed assume that the administrator of the fund would be able to monitor risks adequately. Moreover, when fund solutions are discussed, very often the question who should finance such a fund is neglected. In principle only those who actually contributed to the risk should contribute to the fund. However, when it is clear who (e.g. which hospital) has contributed to specific risks, traditional liability law could be applied as well. An alternative would obviously be to have the compensation fund financed by the State. But in that case one could ask the question at the policy level why specific victims of accidents (in this particular case of medical malpractice) would deserve a better treatment than other victims[100]. Moreover, compensation funds are sometimes advanced with the argument that patients would otherwise receive no compensation. This argument often neglects the fact that, especially in Western Europe, social security systems already cover most of the medical expenses and the income loss. The uncompensated part is therefore usually the pain and suffering and the top of the income[101]. One can therefore question whether far reaching solutions, such as the installation of a compensation fund, are necessary to deal with this relatively marginal problem of the uncompensated damage. Providing a compensation fund for specific victims of accidents and not for others necessarily implies a selection which, once more, leads to a negative redistribution[102].

Because of these – and other – arguments one can understand that many scholars are relatively critical concerning proposals to introduce compensation funds to cover the medical malpractice risks. Those proposals almost always encounter severe criticism from economists[103].

3. Examples: Belgium, Vienna, Sweden

Although one should, for the above mentioned reasons, not expect miracles from no fault compensation schemes for medical malpractice, and there may even be adverse effects as far as incentives are concerned, one can nevertheless point at various proposals to introduce these no fault compensation schemes. Proposals in that direction are discussed in the literature of many of the legal systems mentioned above. It is probably interesting to point at two examples: one is a Belgian academic draft, made by professors who argue that victims of medical malpractice receive no full compensation today and that liability insurance would lead to serious losses for insurers. The Belgian professors have therefore proposed a compensation fund which should be financed by the insurers and by the State[104]. It is, however, unclear, whether the fund will exist in

[100] *See* in that respect critical remarks of Koziol, H., (supra note 74) p. 31, who argues that such a separate regime is contrary to the equality principle

[101] *See* Koziol, H., (supra note 74) p. 30.

[102] So Koziol, H., (supra note 74) p. 33.

[103] *See e.g.* the critical comments concerning fund proposals of Epstein, R., Medical malpractice: its cause and cure (supra note 84), pp. 257–267.

[104] *See* on this fund amoung other Fagnart, J.L., La réparation des accidents médicaux, in Vansweevelt, Th. (ed.), *Responsabilité et Accidents Médicaux* (1996), pp. 53–92. This volume contains several contributions in which also the various intrest groups (medical profession and insurers) react on the proposal for a compensation fund.

combination with liability law and how a risk differentiation can be applied as far as the financing of the fund is concerned.

This applies to some extent as well for another proposal, which has not been elaborated in great detail yet, but is nevertheless interesting. It concerns a proposal made by the city of Vienna to erect a compensation fund for damage suffered by patients[105]. According to this proposal, patients who would become victim of medical malpractice in a hospital of the city of Vienna would be compensated through a fund (to a limited amount!), whereby the city of Vienna would be subrogated in the rights of the patient against the tortfeasor. This proposal, however, raises various questions. First of all it is clear that it can never replace liability law (it is hardly feasible that the city of Vienna could change Austrian tort law). Second, it remains unclear how the fund should be financed. Since it would be impossible to limit compensation to citizens of Vienna, a financing through, for instance, the tax payers of Vienna would amount to a redistribution in favour of non citizens.

Many argue that the Swedish patient insurance system for medical malpractice is a success story which should be copied by many other legal systems[106]. The Swedish report presented above has, however, shown that it is doubtful whether the Swedish system does indeed provide the success story that foreigners often want to see in it[107]. First of all, one may not forget that Sweden already had a far reaching social security scheme. In addition, the Swedish Act on Patient's Damages is, as the Swedish country report indicates, only introduced in 1997 and is based on a compulsory insurance, to be taken out by health care providers to the benefit of patients. Patients can claim damages on a no fault basis, but still have to prove a causal connection with the medical measures. Moreover, in the Swedish system, victims can still claim damages in tort, based on the Swedish tort act of 1972. The fact that liability law remains in existence in addition to the no fault compensation scheme may therefore still provide sufficient incentives for prevention. Moreover, the system is still that recent that there is no conclusive empirical evidence yet as to either the financial viability of the system or its effect on care taken by the health care providers. It seems therefore too soon to draw any final conclusions yet from this Swedish experience.

4. Social Security or Tort Law?

These examples show that although the idea of a no fault compensation scheme may seem like an attractive solution to guarantee some compensation to victims and protect health care providers against liability claims, it is very uncertain that these solutions can be realised in practice. The tendency of legal doctrine and policy makers to seek full compensation for victims of medical

[105] Announcements on this fund could be found among others in Der Standard, 8 October 1997 and in the Kurier, Wien, 8 October 1997.

[106] *See e.g.* the referal to the Swedish system in Austria by Pichler, J., *Rechtsentwicklungen zu einer verschuldensunabhängigen Entschädigung im Medizinbereich* (1994) and Pichler, J., Die Begründbarkeit von Sonderentschädigungsordnungen, in *Haftungsrechtliche Perspektiven der ärztlichen Behandlung* (1997), pp. 35–46 and in Belgium by Vansweevelt, Th., (supra note 104) pp. 866–872.

[107] Swedish report, supra pp. 188–197.

malpractice is obviously not an isolated phenomenon. One can notice in various areas of accident law that victims increasingly refuse to accept less than full compensation. The old adage "the loss lies where it falls" apparently is no longer accepted. This has led to various tendencies in accident law and also in the field of medical malpractice. One tendency is to expand the scope of liability by lowering the standard of liability[108]. In this respect we can refer to the above described tendencies e.g. to reverse the burden of proof.

A second tendency is that the traditional difference between tort law and social security seems to become smaller. The traditional idea was that social security would provide for an easy compensation (with a low threshold), but also for a limited amount, whereas full compensation could only be awarded when the more complex conditions of liability under tort law were met[109]. Victims of accidents now seek "the best of both worlds": they seek the low threshold for compensation of social security, to be combined with full compensation under tort law. This combination will, however, as was shown above, inevitably lead to problems at the insurance level. Traditional tort law and liability insurance have not been developed as mechanisms which should guarantee full compensation to all victims of accidents[110]. One problem is that tort law is now expanded or combined with pleas in favour of no fault compensation schemes whereby often the question who should finance this expanded protection seems to be neglected. The future will probably show that victims and policymakers will have to make a choice between either an automatic compensation which can be warranted through no fault compensation schemes (social security, first-party insurance or compensation fund), but then the damages awarded are necessarily limited (and the question still has to be answered how incentives for prevention can be given) or to rely still on tort law with its full compensation for a necessarily limited number of victims.

E. Harmonization

1. Economic Reasons for Harmonization?

The comparative conclusions and the outcomes of the cases showed that there are still considerable differences between the various legal systems. The question which inevitably arises in that respect in a European context is whether these differences indicate a need for harmonization at the European level. Law and economic scholars become increasingly sceptical as far as European harmonization is concerned. Recently professor Van den Bergh argued in a provocative inauguration address "Adieu Bruxelles?" that the subsidiarity principle should also be interpreted in an economic way[111]. Van den Bergh argues

[108] This obviously has to do with the desire of each victim to shift his loss to someone else. *See* Koziol, H., (supra note 74) p. 21.

[109] *See* Koziol, H., (supra note 74) pp. 33–34.

[110] *See* Hartlief, T., *Ieder draagt zijn eigen schade* (1997), pp. 56–57.

[111] Van den Bergh, R., The subsidiarity principle in European Community Law: some insights from law and economics, [1994] *Maastricht Journal of European and Comparative Law*, 337–366.

that a differentiation of legal rules has the major advantage that legislators can provide rules which correspond in principle to the preferences of the citizens. Moreover, the fact that a large variety of legislative systems exist, with differences between them, has according to this theory the advantage that there will be a competition between legal orders for the optimal legal rule. This theory therefore predicts that decentralized decision making, offering legal rules which correspond best to the preferences of citizens should be the starting point. However, there can be reasons why this market for legal rules may not lead to optimal outcomes. One such reason is externalities. Transboundary externalities may occur if a specific problem which has to be regulated causes costs in another legal order. This could apply e.g. to environmental pollution. Since rivers and air often cross national borders, a decision in one country will inevitably affect other countries, which may therefore be a reason for centralized decision making.

This reason, however, does not apply to health care. As far as health care and medical malpractice is concerned, one can argue that in principle citizens should be free to chose the medical malpractice system which corresponds optimally to their preferences, since they will finally pay the price for such a medical malpractice system. The provision of health care in principle takes place at the local level and has very few extraterritorial effects. The problem that may arise is that patients "escape" to another country where they can get health care faster (or better). These issues are, however, a reason to harmonize social security, but not necessarily medical malpractice. The transboundary character of an externality can therefore not be advanced as a justification for harmonization of medical malpractice.

There is, however, another argument which is often advanced in favour of harmonization, which is the fact that differences between national legal orders would lead to differences in marketing conditions, which may endanger the creation of a common market. This "harmonization of conditions of competition" argument was e.g. the basis for a European intervention in the field of product liability. This idea assumes that all differences in legal rules would endanger market integration. However, from an economic point of view differences between legal rules are only a problem when a single state would be able to attract industry from another state with very low, inefficient standards. In that case a so-called "race to the bottom" would occur, whereby all enterprises would wish to escape to this low standard country. This could then be remedied through centralized standard setting. However, that argument does not seem to play a serious role in either the area of health care or medical malpractice. This "race to the bottom" fear would only lead to an argument in favour of centralization if one could argue that there is a serious risk that e.g. health care providers would escape to states with an inefficiently flexible medical malpractice regime. This does not seem very likely since the location decision of health care providers is obviously not only influenced by the medical malpractice regime, but also by other factors such as e.g. the price to be paid for medical services and the social security regime.

In sum: from an economic point of view differences between legal systems as far as medical malpractice is concerned should not necessarily lead to inef-

ficiencies. These differences may well be useful, since they may correspond with different preferences of the citizens. It is e.g. possible that the citizens in, say Germany, apparently have a preference for a relatively strict medical malpractice regime with high compensation, but are also willing to pay the corresponding price (either in health care services directly or via the tax system) whereas citizens in, say England, might not have a demand for such a strict medical malpractice regime e.g. because they would not be willing to pay the corresponding price. If these different preferences would explain some of the differences between the legal systems, why then should Europe harmonize medical malpractice and force either the Germans to come down to the English level, or England to come up to the German level?

Hence, the conclusion is that the differences found are not necessarily bad from an economic point of view. In addition, it should be argued that also for health care providers these differences in legal regime are not necessarily problematic. For health care providers it is obviously of importance to have the possibility to move freely between member states. Free movement is, however, hardly affected by differing medical malpractice regimes, but much more by the regulation of health care in general and e.g. the mutual recognition of diplomas[112].

Finally, one could argue that a harmonization of medical malpractice should not only be looked at from an economic point of view. One may argue that it would e.g. be important to guarantee a minimum level of protection of victims of medical malpractice in order to give all European citizens a similar level of protection. This argument is, however attractive it may be at the political level, not very convincing given the fact that health care itself has not been harmonized in Europe to a great extent. It would therefore be strange to make the argument that medical malpractice, which in fact affects the wellbeing of the citizens to just a minor extent, should be harmonized whereas health care in general is not.

2. Is Harmonization Possible?

This brings us to another point, being that one should also ask the question whether it would at all be practical to harmonize medical malpractice. Indeed, the comparative analysis has shown that similar cases may lead to very different outcomes in the legal systems examined. This applies both as far as the finding of liability is concerned as well as concerning the amount of damages in case of liability. However, the reasons for these differences were very different. It was striking to notice that in most of the cases most reporters agreed whether in a particular case there was negligence on the side of the health care provider or not[113]. In other words, most reporters agreed on the applicable standard of care and, when the facts were clear, on the question whether that standard was

[112] See in that respect Schneider, H., *Die Anerkennung von Diplomen in der Europäischen Gemeinschaft* (1995).

[113] This is of course not a surprising result, since all country reports relied on the opinion of the experts to decide whether there was negligence or not. This is to a large extent a matter of expert opinion.

breached in a particular case or not. There were often differences as far as the burden of proof was concerned and particularly as far as causation was concerned.

This shows that it may make little sense to harmonize in medical malpractice e.g. the standard of care, since that is apparently not the area where most legal systems differ. Moreover, if the standard of care would be harmonized, the outcome may still be different because of differences of a procedural nature (burden of proof) or differences as far as dealing with causal uncertainty is concerned.

Moreover, the final outcome (what a victim really receives) is obviously also determined by the amounts awarded, but equally by the social security system. The comparative analysis showed that especially as far as the amounts awarded are concerned, there were major differences. Moreover, the compensation which will be paid to a victim of medical malpractice will still primarily be defined by the social security system, at which level there is no harmonization yet. This shows that a harmonization which would solely address the issue of medical malpractice would be totally ineffective. As long as the social security systems still largely differ, the amounts awarded to victims will be different as well. It would thus not lead to an actual harmonization if Europe would only seek to harmonize e.g. the standard of care in medical malpractice.

Finally it is important to stress that medical malpractice should not be viewed independently from general tort law. If one therefore wishes to achieve some form of harmonization, it seems wiser to try first to harmonize general principles of tort law and only to move to medical malpractice in a next step.

The inevitable conclusion therefore is that a harmonization of medical malpractice at the European level, when it is considered isolated from tort law, does not seem to be practicable. It does seem very useful, however, to examine whether common principles may be found which constitute the "roots" of a European tort law. But until such an exercise has been carried through, legal systems with a far-reaching regime of medical malpractice, such as e.g. Germany, will simply have to pay the price of a far reaching protection awarded to victims of medical malpractice.

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